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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,198	12/12/2005	Kari Pulli	941-012179-US (PAR)	6269
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 10/05/2007		EXAMINER NGUYEN, PHU K	
			ART UNIT 2628	PAPER NUMBER
			MAIL DATE 10/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/531,198

Applicant(s)

PULLI ET AL.

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 16-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7-10 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 1-6, 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

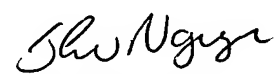
## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
PHU K. NGUYEN  
PRIMARY EXAMINER  
GROUP 2300

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7-10, 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by MORI et al. (7,088,362).

As per claim 1, Mori teaches the claimed “method of preparing object files on a first device that are used for rendering two-dimensional images of three-dimensional objects on a second device by processing object files containing data defining triangle primitives representing at least one three-dimensional object to determine a rendering order in which said triangle primitives may be rendered for creating a two-dimensional image in which the hidden surfaces are removed” comprising the steps of: “a) storing a plurality of planar triangle primitives corresponding to a plurality of surface portions of said at least one object in an object file, wherein said plurality of triangle primitives are represented by vertex data arranged according to an original order” (Mori, vertex processor 30), “b) selecting a triangle that does not potentially occlude any of the unprocessed triangles to start a triangle strip” (Mori, column 11, lines 54-56), “c) selecting a neighboring triangle to add to the last triangle in the triangle strip” (Mori, column 17, lines 18-36), “d) determining whether the selected triangle has the potential to occlude any of the unprocessed triangles” (Mori, column 11, lines 54-56), “e) adding

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the selected triangle to the strip and going back to step c) if the selected triangle does not have the potential to occlude any of the unprocessed triangles" (Mori, column 9, lines 21-58), "f) going back to step b) to start a new triangle strip if the selected triangle has the potential to occlude any of the unprocessed triangles, and g) repeating steps b) to f) until all the triangles in the object file are processed" (Mori, column 9, lines 21-58; column 11, lines 17-61).

Claim 7 adds into claim "transferring said object file or files from said first device to a second device after step f) or k) and storing the object files on said second device" (Mori, column 7, lines 12-48).

Claim 8 adds into claim 1 "a higher performance image processing means, such as used in a PC or a workstation and said second device comprises a lower performance processing means such as used in a mobile communication terminal or a PDA" (Mori, column 6, lines 33-40).

Claim 9 adds into claim 1 "m) determining the viewing direction, and n) determining the object order, preferably using the painter's algorithm and displaying said object or objects on said second device" (Mori, column 11, lines 17-61).

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Claim 10 adds into claim 9 "o) culling all triangles facing backwards relative to said viewing direction" (Mori, column 11, lines 47-61; column 13, lines 12-36).

Claim 12 adds into claim 9 "r) displaying the triangle strips in the same order as they were created, and s) displaying the triangles in the triangle strips in the same order as they were added to the strip" (Mori, column 17, lines 41-60).

Claim 13 adds into claim 9 "said second device comprises a lower performance processing means such as used in a mobile communication terminal or a PDA" (Mori, column 6, lines 33-40).

Claim 14 adds into claim 9 "said second device is a mobile phone" which is inherent for a graphic processor in figure 1.

Claim 15 adds into claim 13 "the image rendering process is carried out by the main CPU of the device, and all the further image rendering means is software embedded" which is inherent for a graphic processor in figure 1.

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Claims 2-6, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 8, 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272 7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu K. Nguyen  
September 28, 2007

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